

CLAIMS

We Claim:

1. A method for an application management system on a mobile information device to download non-Java content to the mobile information device, the method

5 comprising:

downloading a generic content descriptor file for the non-Java content, wherein the generic content descriptor file includes meta-data about the non-Java content; and

processing the generic content descriptor file in order to download the non-Java content to the mobile information device.

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2. A computer readable medium having stored therein instructions for causing a processor to execute the method of claim 1.

3. The method of claim 1, further comprising:

15 downloading the non-Java content to the mobile information device; and installing the non-Java content on the mobile information device.

4. The method of claim 3, wherein downloading the non-Java content to the mobile information device includes downloading the non-Java content from a content-

20 URL included in the generic content descriptor file.

5. The method of claim 3, further comprising posting a response message indicating a success of the download to an install-notify-URL included in the generic content descriptor file.

5 6. The method of claim 3, further comprising displaying options to launch the non-Java content, to exit and to continue browsing.

7. The method of claim 6, further comprising:
receiving a request to continue browsing; and
10 browsing to a URL received in response to post of the response message

8. The method of claim 1, wherein the meta-data includes mandatory attributes and optional attributes, and wherein the mandatory attributes include at least one of Content-Type, Content-Name, Content-Version, Content-Vendor, Content-ID,
15 Content-URL, and Content-Size attributes.

9. The method of claim 1, wherein the meta-data includes mandatory attributes and optional attributes, and wherein the optional attributes include at least one of Content-Install-Notify, Content-Description, Content-Info-URL, Content-Icon-URL,
20 Content-Folder, Content-Storefront-URL, and Content-Domain attributes.

10. The method of claim 1, further comprising:

attempting to download the non-Java content to the mobile information device;

detecting a failure in downloading the non-Java content to the mobile information
device; and

5 posting a response message indicating a failure of the download to an install-
notify-URL included in the generic content descriptor file.

11. The method of claim 10, further comprising displaying on the mobile
information device options to exit and to continue browsing.

10 12. A method for downloading and managing content on a mobile information
device, the method comprising:

downloading a generic content descriptor file to a mobile information device,
wherein the generic content descriptor file includes meta-data about non-Java content.

15 processing the generic content descriptor file;

downloading the non-Java content to the mobile information device;

posting a response indicating that the non-Java content was successfully
downloaded to the mobile information device; and

installing the non-Java content on the mobile information device.

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13. A computer readable medium having stored therein instructions for causing a processor to execute the method of claim 12.

14. The method of claim 12, wherein the non-Java content includes a MIME type, and wherein processing the generic content descriptor file includes determining whether the mobile information device includes an application registered to handle the MIME type.

15. The method of claim 14, further comprising:
determining that the mobile information device does not include an application registered to handle the MIME type; and
offering a user of the mobile information device an option to download an application specified by a content-handler-URI in the generic content descriptor file, wherein the application specified by the content-handler-URI handles applications having the MIME type.

16. The method of claim 14, further comprising:
sending a request to a server to launch a browser, wherein the request includes a URL, and wherein a query portion of the URL is used to search for handlers of the MIME type of the non-Java application;
receiving from the browser a list of at least one application that handles the MIME type of the non-Java application; and

offering a user of the mobile information device an option to download an application specified in the list.

17. The method of claim 12, wherein processing the generic content descriptor
5 file includes:

determining whether the mobile information device includes an application registered to handle the non-Java content; and

if the mobile information device does not include an application registered to handle the non-Java content, the providing a user of the mobile information device an
10 option to download an application is specified by a content-handler-URI in the generic content descriptor file to handle the non-Java content.

18. The method of claim 12, wherein the generic content descriptor file includes a content-version attribute that defines a version of the non-Java content, and
15 wherein processing the generic content descriptor file includes determining whether the mobile information device already includes a version of the non-Java content.

19. The method of claim 12, wherein processing the generic content descriptor file includes determining whether the mobile information device includes enough
20 available non-volatile memory to store the non-Java content.

20. The method of claim 12, wherein downloading the non-Java content includes downloading the non-Java content from a content-URL specified in the generic content descriptor file.

5 21. The method of claim 12, wherein posting a response indicating that the non-Java content was successfully downloaded to the mobile information device includes positing the response to an install-notify-URL specified in the generic content descriptor file.

10 22. The method of claim 12, further comprising presenting a user of the mobile information device with at least one post-install option.